

ABSTRACT OF THE DISCLOSURE

A video decoding system including a demultiplexer unit, a decoding unit, a loop filter unit, an output switch unit, and a prediction unit. The demultiplexer unit receives encoded video data structures including an encoded video data, a motion data, and an intra-prediction mode data. The decoder unit receives the sum of the encoded video data and an encoded prediction data and outputs a decoded video data. The loop filter receives the decoded video data and outputs a filtered video data based on one or more predetermined filter modes. The output switch unit receives a first control data to selectively output either the decoded video data or the filtered video data that has been encoded to be efficiently decoded based on a particular filtering mode. The prediction unit receives the filtered decoded video data, the motion data, and the intra-prediction mode data along with a second control data in order to output a prediction data for modifying the decoding of other encoded video data.